

Claims

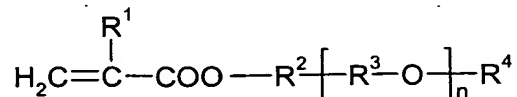
1. The use of copolymers comprising alkylene oxide units and comprising, in randomly or blockwise copolymerized form,

(a) 50 to 93 mol% of acrylic acid and/or a water-soluble salt of acrylic acid,

(b) 5 to 30 mol% of methacrylic acid and/or a water-soluble salt of methacrylic acid

and

(c) 2 to 20 mol% of at least one nonionic monomer of the formula I



in which the variables have the following meanings:

R^1 is hydrogen or methyl;

R^2 is a chemical bond or unbranched or branched $\text{C}_1\text{-C}_6$ -alkylene;

R^3 is identical or different unbranched or branched $\text{C}_2\text{-C}_4$ -alkylene radicals;

R^4 is unbranched or branched $\text{C}_1\text{-C}_6$ -alkyl;

n is 3 to 50,

as deposit-inhibiting additives in the rinsing cycle of a dishwasher.

2. The use according to claim 1, wherein the copolymers comprise 65 to 85 mol% of component (a), 10 to 25 mol% of component (b) and 5 to 15 mol% of component (c) in copolymerized form.

3. The use according to claim 1 or 2, wherein the copolymers comprise 65 to 75 mol% of component (a), 15 to 25 mol% of component (b) and 5 to 10 mol% of component (c) in copolymerized form.

4. The use according to claims 1 to 3, wherein the copolymers comprise, as component (c), a nonionic monomer of the formula I, in which R^1 is methyl, R^2 is a chemical bond, R^3 is $\text{C}_2\text{-C}_3$ -alkylene, R^4 is $\text{C}_1\text{-C}_2$ -alkyl and n is 5 to 40, in copolymerized form.

5. The use according to claims 1 to 4, wherein the copolymers comprise, as component (c), a nonionic monomer of the formula I, in which R^1 is methyl, R^2 is a chemical bond, R^3 is ethylene, R^4 is methyl and n is 10 to 30, in copolymerized form.
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6. The use according to claims 1 to 5, wherein the copolymers comprise $-SO_3^- Na^+$ and/or $-SO_4^- Na^+$ as end groups.
- 10 7. The use according to claims 1 to 6, wherein the copolymers are used in rinse aids for dishwashers.
8. The use according to claims 1 to 6, wherein the copolymers are used in a form formulated into the rinse aid core of a detergent tablet for dishwashers.
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9. A rinse aid for dishwashers which comprises copolymers according to claims 1 to 6 as deposit-inhibiting additive.
10. A detergent tablet for dishwashers which comprises copolymers according to claims 1 to 6 as deposit-inhibiting additive formulated into the rinse aid core.
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Use of copolymers, containing alkylene oxide units, as deposit inhibitor additives in the rinsing process of a dishwasher

Abstract

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Use of copolymers comprising alkylene oxide units and comprising, in randomly or blockwise copolymerized form,

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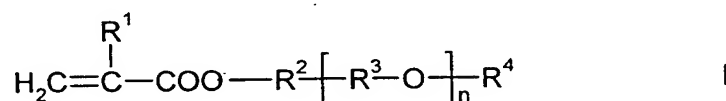
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n is 3 to 50,

as deposit-inhibiting additives in the rinsing cycle of a dishwasher.